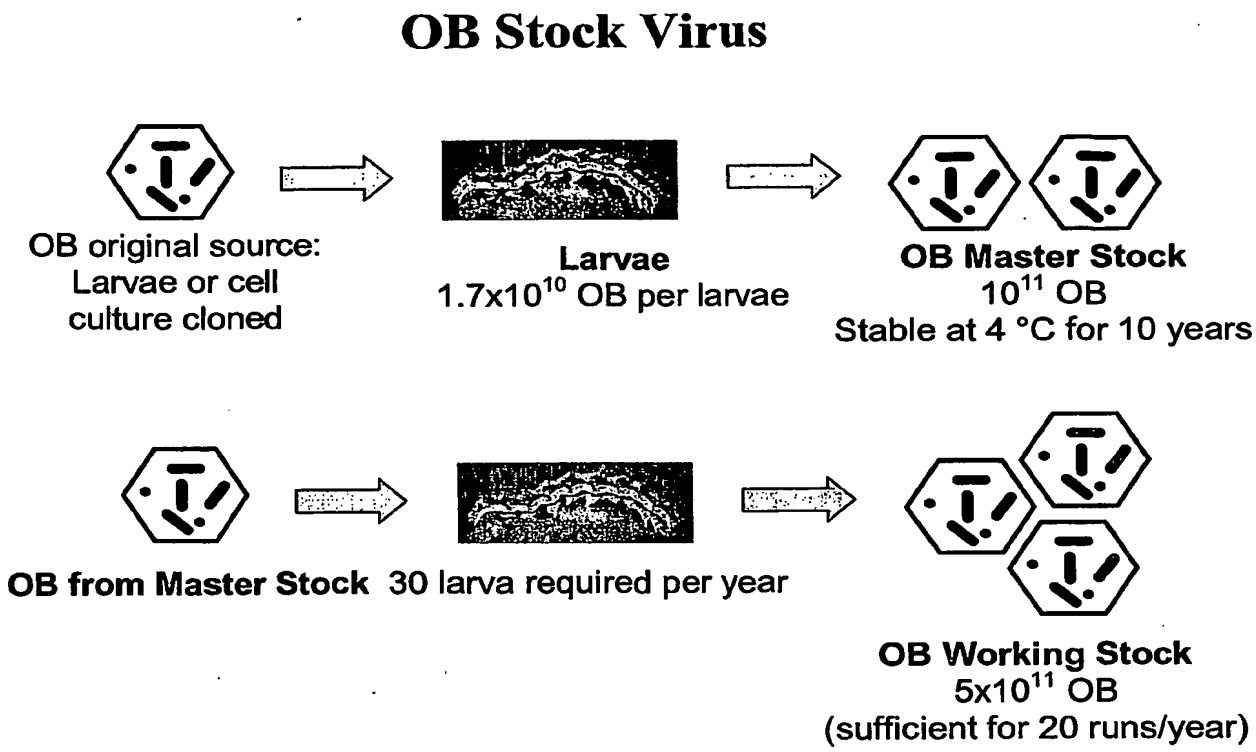
FIG. 1


OB Stock Virus
OB original source:
Larvae or cell
culture cloned
Larvae
1.7x10^10 OB per larvae
OB Master Stock
10^11 OB
Stable at 4 °C for 10 years
OB from Master Stock 30 larva required per year
OB Working Stock
5x10^11 OB
(sufficient for 20 runs/year)

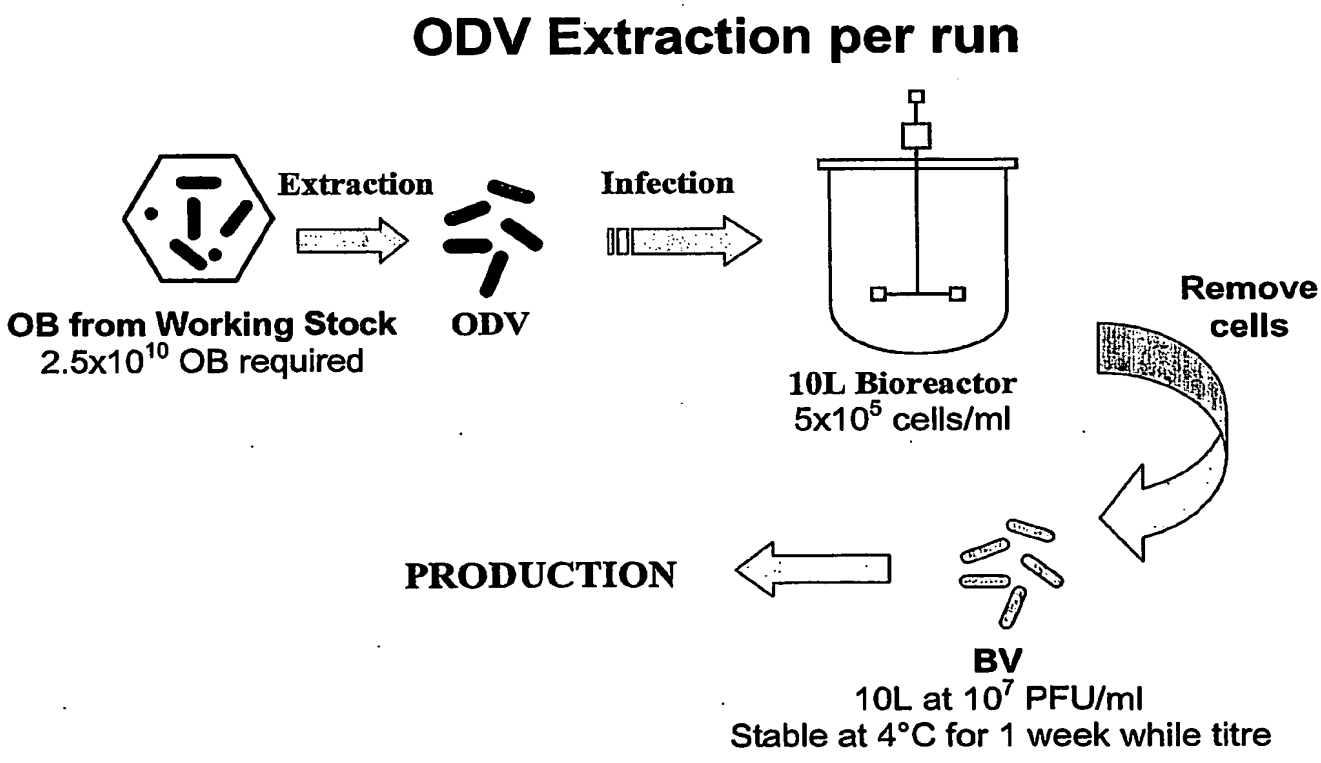

ODV Extraction per run
Extraction
Infection
OB from Working Stock
2.5x10^10 OB required
ODV
10L Bioreactor
5x10^5 cells/ml
Remove
cells
PRODUCTION
BV
10L at 10^7 PFU/ml
Stable at 4°C for 1 week while titre

FIG. 2

VPM3 MEDIA FORMULATION

SALTS

Component	VPM 3 (MG/L)	VPM* (MG/L)
$CaCl_2$	500	500
$CoCl_2.6H_2O$	0.05	0.05
$CuCl_2.2H_2O$	0.20	0.20
$FeSO_4.7H_2O$	1.70	1.70
KCl	1,200	1,200
$MgSO_4$	918	918
$MnCl_2.4H_2O$	0.02	0.02
NaCl	2,700	2,700
$NaHCO_3$	350	350
$NaH_2PO_4.H_2O$	1,160	1,160
$(NH_4)_6Mo_7O_{24}.4H_2O$	0.04	0.04
$ZnSO_4.7H_2O$	0.04	0.04

SUGARS

Component	VPM 3 (MG/L)	VPM* (MG/L)
Glucose	8,000	8,000
Sucrose	3,000	3,000
Maltose	500	500
Trehalose *	500	0
Galactose *	300	0

AMINO ACIDS

Component	VPM 3 (MG/L)	VPM* (MG/L)
L-Cystine.2HCl	200	200
L-Lysine.HCl	300	300
L-Methionine	200	200
L-Asparagine	300	300
L-Glutamic Acid (Na)	3,000	3,000
L-Glutamic Acid (K)	3,000	3,000
Hy Pep Dev 4602	750	750

VITAMINS

Component	VPM 3 (MG/L)	VPM* (MG/L)
Inosine	200	200
Choline Chloride	10	10
Vitamins IPL-41 (100X)	10 ml	10 ml

HYDROLYSATES

Component	VPM 3 (MG/L)	VPM* (MG/L)
Yeast Extract	3,000	3,000
Primatone	2,500	2,500
Hy Soy	500	500
Casein	500	500
Lactalbumin (Edamin S)	500	500

OTHER COMPONENTS

Component	VPM 3 (MG/L)	VPM* (MG/L)
Dextran T 10 *	50	0
Chitosin *	2.5	0
Glutathione (Reduced Na)	10	10
Glycerol	2,000	2,000

LIPIDS

Component	VPM 3 (MG/L)	VPM* (MG/L)
Cholesterol	4.5	4.5
Cod Liver Oil	12.5	12.5
Vitamin E acetate	3	3
Tween 80	25	25
Lecithin (Soya) *	4	0
ETOH (ml)	1.25	1.25
Pluronic Polyol F-68	900	900

Specifications:
pH: 6.2-6.3

Osmolarity: 355-375 mOsm/kg

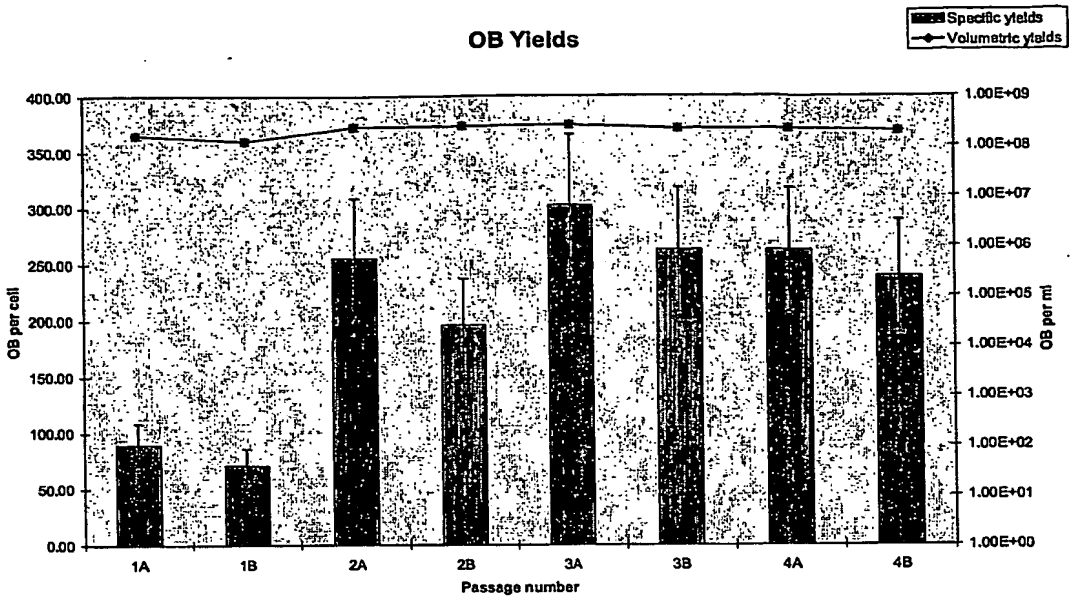
VPM3 and VPM* are low cost serum-free media that we have trialled for the ODV extraction process and subsequent passages. These media are similar but not identical to baculovirus/insect cell culture media reported in the literature. The additives indicated with an asterisk are unique additives by us into VPM3. VPM3 works better than VPM* for the extraction process. Further optimisation of the media for the ODV extraction process is possible.

FIG. 3

Table 1: Virus yield data of different ODV extractions

Number of OB used for extraction	Yield at passage 4 (OB per cell)
$5x10^9$ (100 OB per cell)	283
$2.5 x10^9$ (50 OB per cell)	352
$1x10^9$ (20 OB per cell)	369
$5x10^8$ (10 OB per cell)	339
$2.5 x10^8$ (5 OB per cell)	383

FIG.4


OB Yields
Specific yields
Volumetric yields
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
OB per cell
1.00E+09
1.00E+08
1.00E+07
1.00E+06
1.00E+05
1.00E+04
1.00E+03
1.00E+02
1.00E+01
1.00E+00
OB per ml
1A
1B
2A
2B
3A
3B
4A
4B
Passage number